Forest Health Notes

Volume 10SPB01 June 2010

Low Southern Pine Beetle Activity Predicted for Private Forestlands in North Carolina in 2010

The North Carolina Division of Forest Resources (NCDFR) attempts to predict southern pine beetle (SPB) population levels each spring through pheromone-baited insect traps. Trap data is included in a model developed by the Texas Forest Service to provide early SPB population predictions based upon the ratio of SPB to their primary predator, the clerid beetle. The NCDFR Pest Control Branch would like to extend our thanks to those counties and districts involved in the yearly SPB trapping efforts.

The SPB surpasses all other forest pests for the amount of damage it has caused to pine forests in the past and periodic outbreaks occur on a regular basis over the majority of our state. Last year, SPB activity was again low with no confirmed spots reported by NCDFR personnel. The U.S. Forest Service identified some SPB activity present in the Croatan National Forest, though no SPB spots were reported in District 4 adjacent to the national forest boundaries.

This year, trapping data indicate another low year for populations of SPB in North Carolina. Overall, the surrounding states are also predicted to have continued low populations of SPB this year with a few exceptions as follows:

Virginia: Appomattox/Buckingham and Chesterfield Counties

South Carolina: Oconee, Greenwood, McCormick, and Union Counties and the Long Cane Ranger District of the Sumter National Forest

Georgia: Fort Stewart and the Conasauga and Chattooga Ranger Districts of the Chattahoochee-Oconee National Forest

These locations listed as exceptions are predicted to see some SPB activity this summer, with overall populations remaining low to moderate. Of those listed, Oconee County, SC and the

Chattooga Ranger District of the Chattahoochee-Oconee National Forest in Georgia border North Carolina. The Conasauga Ranger District of the Chattahoochee-Oconee National Forest in Georgia is also in very close proximity to the NC/TN/GA state line.

Though low SPB populations are predicted, we need to continue to be on the lookout for localized and sporadic infestations, as they could occur anywhere in the state. Activity is most likely in pine stands that are overstocked, overmature or stagnant, or have poor soil drainage. Forests affected by littleleaf disease, annosus root rot, and other causes of tree stress may also be susceptible to SPB infestation.

Southern pine beetle aerial detection flights will be conducted again this summer to document any new SPB activity, as well as any other significant damage to our forests. If suspected SPB spots are found during aerial surveys, proper identification during grounds checks is important. Ips beetle galleries are H-, X-, Y- or I-shaped rather than winding S-shaped galleries indicative of southern pine beetles. BTB attacks lower portions of the trunk and are less likely to kill trees than SPB or Ips. Populations of Ips and BTB usually subside after trees regain strength when soil moisture is restored by rain. Pest Control staff is available to assist with identification as well as training in identification and control of bark beetles and other pests as requested.

The NCDFR recommends the use of sound silvicultural practices to prevent SPB damage and encourages landowners to thin overcrowded pine stands (young stands with more 700 trees/acre or older stands with more than120 square feet per acre of basal area). Proper stocking levels promote healthy stands that can better withstand attacks from SPB. The NCDFR continues to provide Southern Pine Beetle Prevention Program cost-share funds (funded through a grant from the USDA Forest Service) for thinning young stands to give them a healthy start and to aid in the prevention of future of SPB outbreaks.

This publication was published in Portable Document Format (PDF) to inform and educate NCDFR personnel and other forestry interests about health issues affecting North Carolina forest resources.